

CLEAN COPY OF THE AMENDED CLAIMS

In the Claims:

Please delete pending Claims ~~1~~ and ~~2~~.

Please add the following new Claims 3-48.

3. A method of high-speed bag manufacturing, comprising the step of:

a. bringing into contact at least one first fabric section, at least one second fabric section and at least one film section to form a prepared sheet,

wherein said prepared sheet is capable of being V-folded along a central axis to form a closed butt end, and wherein the opposing overlapping edges of said prepared sheet are capable of being sealed to form a bag having at least one opening.

4. The method of Claim 3, wherein at least one edge of said at least one first fabric section and at least one edge of said at least one second fabric section are heat sealed to opposing edges of said at least one film section.

5. The method of Claim 3, wherein said at least one first fabric section possesses a width at least equal to the combined widths of said at least one film section and said at least one second fabric section, such that said central axis is disposed on said at least one first fabric section.

6. The method of Claim 3, wherein said at least one first fabric section and said at least one second fabric section are a cross-laminated thermoplastic nonwoven net-like fabric.

7. The method of Claim 3, wherein said at least one film section is a polymeric film capable of receiving print thereon to permit said at least one film section to serve as a label section for said bag.

8. The method of Claim 3, wherein said opposing overlapping edges of said prepared sheet are sealed via at least one first thermoplastic sealing strip and at least one second thermoplastic sealing strip.

9. The method of Claim 8, wherein said at least one first thermoplastic sealing strip and said at least one second thermoplastic sealing strip are carried by opposing edges of said at least one first fabric section, extending perpendicularly from said central axis through the remaining width of said at least one first fabric section.

10. The method of Claim 9, wherein V-folding of said prepared sheet along said central axis results in said at least one first thermoplastic sealing strip and said at least one second thermoplastic sealing strip sealing said opposing overlapping edges of said prepared sheet upon application of heat and pressure thereto.

11. A method of high-speed bag manufacturing, comprising the steps of:

a. bringing into contact at least one first fabric section, at least one second fabric section and at least one film section to form a prepared sheet, wherein said prepared sheet is capable of being V-folded along a central axis to form a closed butt end, and wherein the opposing overlapping edges of said prepared sheet are capable of being sealed to form a bag having at least one opening; and

b. sealing said opposing overlapping edges of said prepared sheet via a sealing means.

12. The method of Claim 11, wherein at least one edge of said at least one first fabric section and at least one edge of said at least one second fabric section are heat sealed to opposing edges of said at least one film section.

13. The method of Claim 11, wherein said at least one first fabric section possesses a width at least equal to the combined widths of said at least one film section and said at least one second fabric section, such that said central axis is disposed on said at least one first fabric section.

14. The method of Claim 11, wherein said at least one first fabric section and said at least one second fabric section are a cross-laminated thermoplastic nonwoven net-like fabric.

15. The method of Claim 11, wherein said at least one film section is a polymeric film capable of receiving print thereon to permit said at least one film section to serve as a label section for said bag.

16. The method of Claim 11, wherein said sealing means is at least one first thermoplastic sealing strip and at least one second thermoplastic sealing strip.

17. The method of Claim 16, wherein said at least one first thermoplastic sealing strip and said at least one second thermoplastic sealing strip are carried by opposing edges of said at least one first fabric section, extending perpendicularly from said central axis through the remaining width of said at least one first fabric section.

18. The method of Claim 17, wherein V-folding of said prepared sheet along said central axis results in said at least one first thermoplastic sealing strip and said at least one second thermoplastic sealing strip sealing said opposing overlapping edges of said prepared sheet upon application of heat and pressure thereto.

19. A method of high-speed bag manufacturing, comprising the step of:

a. bringing into contact at least one first fabric section, at least one second fabric section and at least one film section to form a prepared sheet, wherein said at least one first fabric section possesses a width at least equal to the combined widths of

said at least one film section and said at least one second fabric section such that a central axis is disposed on said at least one first fabric section, and

wherein said prepared sheet is capable of being V-folded along said central axis to form a closed, butt end, and wherein the opposing overlapping edges of said prepared sheet are capable of being sealed to form a bag having at least one opening.

20. The method of Claim 19, wherein at least one edge of said at least one first fabric section and at least one edge of said at least one second fabric section are heat sealed to opposing edges of said at least one film section.

21. The method of Claim 19, wherein said at least one first fabric section and said at least one second fabric section are a cross-laminated thermoplastic nonwoven net-like fabric.

22. The method of Claim 19, wherein said at least one film section is a polymeric film capable of receiving print thereon to permit said at least one film section to serve as a label section for said bag.

23. The method of Claim 19, wherein said opposing overlapping edges of said prepared sheet are sealed via at least one first thermoplastic sealing strip and at least one second thermoplastic sealing strip.

24. The method of Claim 23, wherein said at least one first thermoplastic sealing strip and said at least one second thermoplastic sealing strip are carried by opposing edges of said at least one first fabric section, extending perpendicularly from said central axis through the remaining width of said at least one first fabric section.

25. The method of Claim 24, wherein V-folding of said prepared sheet along said central axis results in said at least one first thermoplastic sealing strip and said at least one second thermoplastic sealing strip sealing said opposing overlapping edges of said prepared sheet upon application of heat and pressure thereto.

26. A method of high-speed bag manufacturing, comprising the step of:

a. bringing into contact at least one first continuous stream of fabric, at least one second continuous stream of fabric and at least one continuous stream of film to form a bag stock,

wherein said bag stock is capable of being V-folded along a longitudinally disposed central axis to form a continuous, closed butt end, and wherein said bag stock is capable of being transversely sealed and cut at pre-selected distances to form bags having at least one opening.

27. The method of Claim 26, wherein at least one edge of said at least one first continuous stream of fabric and at least one edge of said at least one second

continuous stream of fabric are heat sealed to opposing edges of said at least one continuous stream of film.

28. The method of Claim 26, wherein said at least one first continuous stream of fabric possesses a width at least equal to the combined widths of said at least one continuous stream of film and said at least one second continuous stream of fabric, such that said central axis is disposed on said at least one first continuous stream of fabric.

29. The method of Claim 26, wherein said at least one first continuous stream of fabric and said at least one second continuous stream of fabric are a cross-laminated thermoplastic nonwoven net-like fabric.

30. The method of Claim 26, wherein said at least one continuous stream of film is a polymeric film capable of receiving print thereon to permit said at least one continuous stream film to serve as a label section for said bag.

31. The method of Claim 26, wherein a plurality of thermoplastic sealing strips are carried by and transversely positioned at regular intervals along the longitudinal direction of said at least one first continuous stream of fabric, extending perpendicularly from said central axis through the remaining width of said at least one first continuous stream of fabric, such that said bags cut from said bag stock each

possess at least one first thermoplastic sealing strip and at least one second thermoplastic sealing strip positioned at opposite edges thereof.

32. The method of Claim 31, wherein application of heat and pressure to V-folded said bag stock results in said plurality of thermoplastic sealing strips being transversely sealed across V-folded said bag stock.

33. The method of Claim 31, wherein each thermoplastic sealing strip of said plurality of thermoplastic sealing strips possess a width at least equal to the combined widths of said at least one first thermoplastic sealing strip and said at least one second thermoplastic sealing strip such that the traverse cutting of said bag stock along each thermoplastic sealing strip of said plurality of thermoplastic sealing strips yields said at least one first thermoplastic sealing strip for a first cut said bag, and said at least one second thermoplastic sealing strip for a second cut said bag.

34. A method of high-speed bag manufacturing, comprising the steps of:

a. bringing into contact at least one first continuous stream of fabric, at least one second continuous stream of fabric and at least one continuous stream of film to form a bag stock, wherein said bag stock is capable of being V-folded along a longitudinally disposed central axis to form a continuous, closed butt end, and wherein

said bag stock is capable of being transversely sealed and cut at pre-selected distances to form bags having at least one opening; and

b. sealing V-folded said bag stock at said pre-selected distances via a sealing means.

35. The method of Claim 34, wherein at least one edge of said at least one first continuous stream of fabric and at least one edge of said at least one second continuous stream of fabric are heat sealed to opposing edges of said at least one continuous stream of film.

36. The method of Claim 34, wherein said at least one first continuous stream of fabric possesses a width at least equal to the combined widths of said at least one continuous stream of film and said at least one second continuous stream of fabric, such that said central axis is disposed on said at least one first continuous stream of fabric.

37. The method of Claim 34, wherein said at least one first continuous stream of fabric and said at least one second continuous stream of fabric are a cross-laminated thermoplastic nonwoven net-like fabric.

38. The method of Claim 34, wherein said at least one continuous stream of film is a polymeric film capable of receiving print thereon to permit said at least one continuous stream film to serve as a label section for said bag.

39. The method of Claim 34, wherein said sealing means is a plurality of thermoplastic sealing strips carried by and transversely positioned at regular intervals along the longitudinal direction of said at least one first continuous stream of fabric, extending perpendicularly from said central axis through the remaining width of said at least one first continuous stream of fabric, such that said bags cut from said bag stock each possess at least one first thermoplastic sealing strip and at least one second thermoplastic sealing strip positioned at opposite edges thereof.

40. The method of Claim 39, wherein application of heat and pressure to V-folded said bag stock results in said plurality of thermoplastic sealing strips being transversely sealed across V-folded said bag stock.

41. The method of Claim 39, wherein each thermoplastic sealing strip of said plurality of thermoplastic sealing strips possess a width at least equal to the combined widths of said at least one first thermoplastic sealing strip and said at least one second thermoplastic sealing strip such that the traverse cutting of said bag stock along each thermoplastic sealing strip of said plurality of thermoplastic sealing strips yields said at least one first thermoplastic sealing strip for a first cut

said bag, and said at least one second thermoplastic sealing strip for a second cut said bag.

42. A method of high-speed bag manufacturing, comprising the step of:

a. bringing into contact at least one first continuous stream of fabric, at least one second continuous stream of fabric and at least one continuous stream of film to form a bag stock, wherein said at least one first continuous stream of fabric possesses a width at least equal to the combined widths of said at least one continuous stream of film and said at least one second continuous stream of fabric such that a central axis is longitudinally disposed on said at least one first continuous stream of fabric, and

wherein said bag stock is capable of being V-folded along said central axis to form a continuous, closed butt end, and wherein said bag stock is capable of being transversely sealed and cut at pre-selected distances to form bags having at least one opening.

43. The method of Claim 42, wherein at least one edge of said at least one first continuous stream of fabric and at least one edge of said at least one second continuous stream of fabric are heat sealed to opposing edges of said at least one continuous stream of film.

44. The method of Claim 42, wherein said at least one first continuous stream of fabric and said at least one second continuous stream of fabric are a cross-laminated thermoplastic nonwoven net-like fabric.

45. The method of Claim 42, wherein said at least one continuous stream of film is a polymeric film capable of receiving print thereon to permit said at least one continuous stream film to serve as a label section for said bag.

46. The method of Claim 42, wherein a plurality of thermoplastic sealing strips are carried by and transversely positioned at regular intervals along the longitudinal direction of said at least one first continuous stream of fabric, extending perpendicularly from said central axis through the remaining width of said at least one first continuous stream of fabric, such that said bags cut from said bag stock each possess at least one first thermoplastic sealing strip and at least one second thermoplastic sealing strip positioned at opposite edges thereof.

47. The method of Claim 46, wherein application of heat and pressure to V-folded said bag stock results in said plurality of thermoplastic sealing strips being transversely sealed across V-folded said bag stock.

48. The method of Claim 46, wherein each thermoplastic sealing strip of said plurality of thermoplastic sealing strips possess a width at least equal to the

concluz
A1

combined widths of said at least one first thermoplastic sealing strip and said at least one second thermoplastic sealing strip such that the traverse cutting of said bag stock along each thermoplastic sealing strip of said plurality of thermoplastic sealing strips yields said at least one first thermoplastic sealing strip for a first cut said bag, and said at least one second thermoplastic sealing strip for a second cut said bag.

CLEAN COPY OF SPECIFICATION CHANGES

In the Specification:

Please replace paragraph 1, lines 9-27 on page 5, and lines 1-12 on page 6, with the following new paragraph:

A2

Furthermore, the film material utilized to manufacture the Fox et al. mesh fabric/film bag is not as structurally durable as the fabric material (i.e., CLAF) utilized to manufacture the mesh fabric/film bag, as the film material is basically a low-density polyethylene/ethylene-vinyl acetate blend (LDPE/EVA), suited for use in continuous sealing equipment. The current Volm side sealed bag and Fox et al. tubed bags use oriented polyester or polypropylene films with linear LDPE (LLDPE) or similar material laminated thereto so as to allow heat-sealing of the films to the CLAF fabric. The need for the PET or OPP label materials arises from the need to apply the film/label in an intermittent mode,

utilizing high temperatures (320 deg. F est.) and short dwell times. The continuous sealing method allows the use of lower temperatures so that melting of the LDPE label is prevented. Disadvantageously however, the OPP or PET labels with laminated LLDPE material are very expensive, as opposed to the relatively inexpensive LDPE/EVA type film used in the CLAF/film bags. As such, the real disadvantage of the Fox (and Volm) CLAF/film bag is that it incorporates less mesh material and therefore has less breathability versus knitted bags or all-CLAF tubed or side sealed bags. In essence, the Fox (and Volm) CLAF/film bags are a compromise between an all-plastic bag and an all-CLAF bag. By incorporating the lower cost LDPE type label with the side sealed bag, the cost is reduced and is closer to the CLAF/film bag, in part due to reduced fabric use, but primarily because of lower label cost. A further disadvantage of the Fox et al. CLAF/film bag is that when stacked in a store to display the label, the CLAF fabric is completely hidden, thus reducing bag-breathability and making it appear as an ordinary plastic bag.

Please replace paragraph 1, lines 1-15 on page 13 with the following new paragraph:

First edge 66 of label section 60 preferably overlaps and is preferably continuously longitudinally heat sealed to third edge 30 of first fabric section 20, and third edge 70 of label section 60 preferably overlaps and is preferably continuously longitudinally heat sealed to first edge 46 of second fabric section 40. Because first and second fabric sections 20 and 40, respectively, and label section 60 are preferably supplied as continuous rolls of

Q3 fabric or label material, continuous longitudinally heat sealing of first and second fabric sections 20 and 40, respectively, to label section 60 preferably forms a roll of bag substrate or prepared web 80 having fabric/label/fabric panels, wherein each bag 10 is thereby preferably formed from a sectional piece or sheet 81 of prepared web 80 and therefore has fabric/label/fabric panels joined by continuous longitudinal heat seals, as best illustrated in FIG. 1.

Please replace paragraph 2, lines 17-24 on page 13 with the following new paragraph:

Q4 By virtue of first fabric section 20 being larger in width than the combined widths of second fabric section 40 and label section 60, longitudinal central axis 90 is generally disposed on first fabric section 20. Moreover thermoplastic sealing strips 100 and 110 are applied proximate to second edge 28 and fourth edge 32, respectively, on top surface 22 of first fabric section 20, and extend preferably from first edge 26 of first fabric section 20 to central axis 90.

Please replace paragraph 3, lines 26-27 on page 13, and lines 1-8 on page 14, with the following new paragraph:

~~15~~ Referring specifically now to FIG. 2, upon V-folding of unfolded bag 10 along central axis 90, a bottom, or butt end, 12 is formed. The fabric and/or label material on each side of the fold extends from the fold and terminates at opposing end 11 of bag 10. Opposing end 11 can be open, for example prior to filling thereof, or it can be closed, for example after filling of the bag. Any suitable means for effecting such closure can be used, such as stitching or sewing, lacing and tying, stapling, use of adhesives, heat sealing, use of rib-and-groove elements and/or twist-type closures.

Please replace paragraph 1, lines 1-13 on page 15 with the following new paragraph:

~~16~~ Applied pressure and heat to seams 120 and 130 cause thermoplastic sealing strips 100 and 110 to melt and heat seal seams 120 and 130, thus giving bag 10 structure. By virtue of heat sealing seams 120 and 130, the respective edges of first and second fabric sections 20 and 40, respectively, and label section 60 that form seams 120 and 130 are embedded in thermoplastic sealing strips 100 and 110, thereby providing strength despite low surface area of the mesh fabric at seams 100 and 110. Butt end 12 and opposing end 11 of bag 10, together with the heat sealed seams 120 and 130, define a perimeter of the fabric/label material that forms a space or volume for receiving and containing contents placed into bag 10.

Please replace paragraph 1, lines 8-24 on page 17, with the following new paragraph:

AM

First and second fabric sections 20 and 40, respectively, of bag 10 can be constructed, in general, from any open mesh fabric to which can be heat sealed thermoplastic strips 100 and 120, or any additional thermoplastic sealing strips, to form seams 120 and 130. Woven, knit, scrim, extruded net and nonwoven fabrics can be utilized provided they have sufficient openness of construction to allow adequate visibility of the contents of bag 10. Preferably, the open mesh fabric also is suitable for processing into bags using high-speed bag-making equipment. To that end, fabrics having a coefficient of friction according to ASTM 3334-80 Section 15 of less than about 30° and dimensional stability such that the fabric, when folded and seamed, can withstand at least about one G-force without substantial deregistration are especially preferred. Most preferred fabrics have coefficients of friction of about 15° to about 25° and can withstand G-forces of at least about 2 without substantial deregistration.

Please replace paragraph 1, lines 22-27 on page 29, and lines 1-7 on page 30, with the following new paragraph:

AS


In greater detail, film strips 100 and 110 are generally applied to the first fabric section 20, extending from first edge 26 to central axis 90. Strips 100 and 110 can be secured to first fabric section 20 by any means effective to provide a strong enough bond

AS between first fabric section 20 and strips 100 and 110 to stand up to downstream processing steps. Preferably, strips 100 and 110 are lightly heat sealed to first fabric section 20 using a sealing bar or other strip application equipment. Most preferably, the heat-sealable material in the form of strips of thermoplastic film 100 and 110 are affixed to first fabric section 20 in the cross machine direction at uniformly spaced intervals and at a distance of about one-half the width of sheet 81, as best illustrated in **FIG. 1**.


Please replace paragraph 1, lines 9-21 on page 30 with the following new paragraph:

AS9 Film strips 100 and 110 are preferably applied to approximately one-half the width of sheet 81 so that when sheet 81 is folded along central axis 90, film strips 100 and 110 will extend longitudinally along the full length or height of bag 10. The exact length of the film strips across the width of first fabric section 20 will depend on the closing mechanism employed for closing bag 10, with the length of the strip being somewhat less than half the width of sheet 81 if an overlap of bag fabric material is used to close the open end of bag 10. In cases where the bags are gusseted with a one inch deep gusset, for example, the film strip is preferably applied at a distance about one inch more than one half the width of sheet 81 so that each layer in the gusset is touching the film.

Please replace paragraph 2, lines 23-27 on page 30, and lines 1-8 on page 31, with the following new paragraph:

 The width and thickness of film strips 100 and 110 should be sufficient for effective heat sealing to form the side seams of bag 10. In one embodiment of the process, the film strips are generally somewhat greater than twice the desired width of the seal for the side seam of the finished bags, thereby allowing bags to be slit at the side seam so as to reduce the frequency of applying the strips to first fabric section 20 in the process. For example, with a one-inch wide seal bar, a 1 and 1/4 inch wide film strip may be used and the seam slit to form two, one-half inch wide side seams. The slightly wider film strip is used to ensure that only fabric with heat-sealable film between layers of the fabric is exposed to the hot seal bar.

Please replace paragraph 2, lines 23-27 on page 31, lines 1-26 on page 32, and lines 1-2 on page 33, with the following new paragraph:

 Referring now to **FIG. 3**, there is illustrated a portion of preferred web 80 showing sealing strips 100 and 110 and additional strips 150 and 160 applied to top surface 22 of first fabric sheet 20. Fabric in this form is suited for use as bag stock, in flat or roll form, for manufacture of bags. Thus, the present invention also provides bag stock comprising an open mesh fabric having a plurality of strips of heat sealable thermoplastic resin affixed

thereto, with the strips being positioned at essentially regular intervals along a lengthwise direction of first fabric section 20 and each strip being affixed across a widthwise direction of first fabric section 20. As seen from **FIG. 3**, heat sealable strips 100, 110, 150 and 160 are secured to top surface 22 of first fabric section 20 at substantially regular intervals. The strips conveniently are formed from a thermoplastic film and are lightly heat sealed or tacked to first fabric section 20. **FIG. 8** illustrates prepared web 80 from which sheets 81 are cut, having affixed strips of thermoplastic resin film 100 and 110 thereon, wherein prepared web 80 is provided in the form of roll 346. Generally, heat-sealable film strips 100 and 110 are about twice the desired width used in the side seams of the open mesh bags for bags formed on high-speed bag-making equipment. Bottom or butt end 12 of bag 10 is formed by folding unfolded bag 10 on a central axis 90 so that each side seam of bag 10 comprises a section of first fabric section 20 and a section of second fabric section 40 and label section 60, wherein heat-sealable strips are positioned on about one-half the width of sheet 81 and spaced on first fabric section 20 so that bag 10 side seams are formed from heat sealing first fabric section 20 to second fabric section 40 and label section 60 via the thermoplastic sealing strips. Each film strip 100, 110, 150 and 160 is thus cut in half longitudinally as the bags are formed and each strip 100, 110, 150 and 160 thus provides two side seams.

Please replace paragraph 1, lines 9-27 on page 34, with the following new paragraph:

12 Label section 60 may conveniently be made from printable polymeric films available commercially such as preferably composites of low-density polyethylene blended with ethylene-vinyl acetate, linear low-density polyethylene or metallocene polyethylene to improve sealing or a multi-layer film such as, for exemplary purposes only, a high-density polyethylene/linear low-density polyethylene/blend coextruded. Such films are generally available from Winpak Inc., in 2 and 3 mil thickness. Coated films also can be used. Label section 60 may also be made from a film comprising linear low-density polyethylene/polyester or from oriented polypropylene film coated with low or linear low-density polyethylene. A label made from 1.25 mil linear low density polyethylene and 0.5 mil polyester has been found to have acceptable performance properties in this application. Depending on economics, a film of linear low-density polyethylene only can also be used, although the printability of such film is not as good as that of some of the composite films.

Please replace paragraph 1, lines 1-27 on page 35, and lines 1-18 on page 36, with the following new paragraph:

13 A preferred apparatus for manufacture of bag stock for making the invented bags, comprising sealing strips 100, 110, and additionally strips 150 and 160, of a thermoplastic resin affixed to top surface 22 of first fabric section 20 at selected locations. Heat sealing

13
the edges of first fabric section 20 and second fabric section 40 to opposing edges of printed or printable label section 60, and means for advancing each of a bag substrate, thermoplastic polymeric film and label section from sources thereof continuously through the apparatus such that prepared web 80 is formed; means for intermittently stopping and resuming passage of prepared web 80 through the apparatus based on indicators or label eye marks 200 detectible on label section 60; a strip applicator disposed in the path of the prepared web 80 comprising means for transversely affixing a leading edge of thermoplastic polymeric film strips 100, 110, 150 and 160 to prepared web 80 and means for transversely cutting thermoplastic polymeric film strips 100, 110, 150 and 160 at a selected distance upstream of the leading edge thereof; a heat sealing device located in the path of the prepared web 80 downstream of the point of contact of the edges of label section 60 and second fabric section 40 to the respective edges of first fabric section 20; and takeoff means for continuously removing bag stock from the apparatus. Preferably the label section 60 is advanced through the apparatus from a double width roll of label material by means of a braked unwind shaft, with a cutting blade or other suitable slitting device positioned in the path of label section 60 for cutting it into two bands, each of which is advanced through adjustable position dual turn bars onto the substrate at equal distances from the centerline thereof. A preferred strip applicator device includes means for directing bursts of air or other suitable fluid at the thermoplastic resin film strips 100, 110, 150 and 160 from one or both sides of the substrate to assist in positioning film strips 100, 110, 150 and 160 relative to first fabric section 20. Cutting of the film strip is preferably accomplished using a reciprocating knife blade - blade clamp assembly adapted to

AB intermittently close on and cut film strips 100, 110, 150 and 160, and then open to allow advancement of film. Most preferably, the knife blade assembly includes means for heating the blade for smoother cutting. Simultaneously with the cutting of film strips 100, 110, 150 and 160, a leading edge of the film strips 100, 110, 150 and/or 160 is affixed to first fabric section 20, most preferably using a heat seal bar located such that it contacts the film strip 100, 110, 150 and/or 160 in contact with first fabric section 20.

Please replace paragraph 1, lines 20-27 on page 36, and lines 1-16 on page 37, with the following new paragraph:

AB FIGS. 4-8 illustrate a preferred apparatus and method of using the same for manufacture of bag stock from which the invented bags can be formed. Referring now to FIG. 4, a bag- stock-making machine 500 is shown, wherein preferably a stream of film material 300, used to form label section 60 of bag 10, is supplied by a roll 302 of continuous film material 300. Furthermore, preferably two rolls 378A and 378B supply continuous streams of open mesh fabric 340A and 340B, respectively, wherein rolls 378A and 378B and roll 302 are unwound by web drive 362 in a continuous manner, and wherein rolls 378A and 378B preferably flank roll 302 of film material 300. Preferably, streams of open mesh fabric 340A and 340B result in formation of first fabric section 20 and second fabric section 40, respectively, of bag 10. Preferably, stream of film material 300 is continuously heat sealed in the machine direction to streams of open mesh fabric 340A and

340B via heat sealer 310, thus forming bag substrate 360. Although it is preferred that stream of film material 300 and streams of open mesh fabric 340A and 340B be continuously heat sealed via heat sealer 310 prior to advancing through the remainder of the bag-making machinery, it is contemplated in alternate embodiments that stream of film material 300 and streams of open mesh fabric 340A and 340B could be heat sealed in a separate piece of machinery, and thereafter fed into the bag making machinery.
